

IN THE SPECIFICATION:

*Please replace the paragraph beginning on page 3, line 10 with the following rewritten paragraph.*

The quantization control circuit 58 ~~inputs~~ receives the video information pieces 519, 529, 539, and 549 each representing the nature of the video images processed in the coding units 512, 522, 532, and 542 and also receives the transmission buffer information pieces 517, 527, 537, and 547 each representing the state of the corresponding transmission buffer, generates the quantization control signals 518, 528, 538, and 548 used in the coding units 512, 522, 532, and 542 respectively, and outputs the quantization control signals 518, 528, 538, and 548 to the coding units 512, 522, 532, and 542 respectively.

*Please replace the paragraph beginning on page 4, line 6 with the following rewritten paragraph.*

The buffered video signals 515, 525, 535, and 545 ~~input in order~~ are output from the transmission circuit 57 as the coded video signal 55 of the video signal 50.

*Please replace the paragraph beginning on page 5, line 15 with the following rewritten paragraph.*

It is another object of the invention to provide a media data coding and multiplexing apparatus, a media data coding and multiplexing system, and a media data coding and multiplexing method for making it possible to prepare a multiplex stream of a plurality of video, audio, etc., as well as high definition of video when a parallel processing control circuit similar to that in a related art and a plurality of the modules are used in combination.

*Please replace the paragraph beginning on page 10, line 10 with the following rewritten paragraph.*

In a first embodiment of the invention, the case where high-definition, for example, HDTV video is coded in a media data coding and multiplexing system using a plurality of media data coding and multiplexing apparatus of the invention will be discussed.

*Please replace the paragraph beginning on page 10, line 15 with the following rewritten paragraph.*

Specifically, the configuration will be discussed wherein four media data coding and multiplexing apparatus 1 to 4 of the invention are connected, wherein a video signal 100 having a large information amount is processed in parallel in the media data coding and multiplexing apparatus 1 to 4, any other media data of an audio signal 240, a data signal 340, etc., is processed in the media data coding and multiplexing apparatus 4, and a multiplexing section ~~44~~43 of the media data coding and multiplexing apparatus 4 combines the signals and output multiplex streams 119, 129, and 139 output from other media data coding and multiplexing apparatus 1 to 3 into one output multiplex stream 149 finally.

*Please replace the paragraph beginning on page 11, line 9 with the following rewritten paragraph.*

The media data coding and multiplexing apparatus 1 to 4 have the same internal configuration; each media data coding and multiplexing apparatus comprises a multiplexing section of six inputs of a coded video signal output from a video coding

section of a video signal, a coded audio signal output from an audio coding section of an audio signal, a data signal, and three external inputs and a parameter setting section. However, for simplicity, only the apparatus 4 is shown with six inputs.

*Please replace the paragraph beginning on page 12, line 14 with the following rewritten paragraph.*

The video signal dividing circuit 5 divides the input video signal 100 ~~into the divided video signals 110, 120, 130, and 140~~ and outputs the divided video signals 110, 120, 130, and 140 to the video coding sections 11, 21, 31, and 41 of the media data coding and multiplexing apparatus 1 to 4, respectively.

*Please replace the paragraph beginning on page X, line Y with the following rewritten paragraph.*

The control circuit 6 receives inputs the information pieces 113, 123, 133, and 143 concerning video such as the complexity of video output from the video coding sections 11, 21, 31, and 41 and outputs the control signals 114, 124, 134, and 144 of quantization control signals, etc., at ~~the~~ video coding time to the video coding sections 11, 21, 31, and 41.

*Please replace the paragraph beginning on page 13, line 2 with the following rewritten paragraph.*

In the first embodiment, the divided video signals 110, 120, and 130 provided by the video signal dividing circuit 5 ~~only~~ input ~~provided~~ to the media data coding and multiplexing apparatus 1 to 3. ~~and audio~~ Audio, data, and external signals are not ~~input~~ provided to the media data coding and multiplexing apparatus 1-3.

*Please replace the paragraph beginning on page 13, line 25 with the following rewritten paragraph.*

In the parameter setting sections 14, 24, and 34, no parameters are set in ~~none of~~ the multiplex coded streams 118, 128, and 138 output from the multiplexing sections 13, 23, and 33 and the multiplex coded streams 118, 128, and 138 are output as the output multiplex streams 119, 129, and 139.

*Please replace the paragraph beginning on page 14, line 11 with the following rewritten paragraph.*

Therefore, in the media data coding and multiplexing apparatus 4, the video coding section 41 and the audio coding

section 42 code and the multiplexing section 43 multiplexes the video signal 140, audio signal 240, and the data signal 340.

*Please replace the paragraph beginning on page 15, line 2 with the following rewritten paragraph.*

The multiplexing section 43 packets the coded video signal 141 output from the video coding section 41, the coded audio signal 241 output from the audio coding section 42, and the input data signal 340, and outputs the multiplex coded stream 148. The multiplexing section 43 also combines the multiplex stream 119, 129, and 139 into the multiplex coded stream 148.

*Please replace the paragraph beginning on page 17, line 7 with the following rewritten paragraph.*

When the multiplex coded stream is a TS, the same PID is added to the divided video signals 111, 121, 131, and 141 provided by the video signal dividing circuit 5. This means that the PID added to the TS packets of video of the multiplex streams 119, 129, 139, and 149 from the media data coding and multiplexing apparatus 1 to 3 input to the multiplexing section ~~44~~43 of the media data coding and multiplexing apparatus 4 and

the PID added to the TS packet of video newly generated in the multiplexing section 44-43 are the same.

*Please replace the paragraph beginning on page 18, line 6 with the following rewritten paragraph.*

Like the CC, the PCR is also a parameter whose ~~continuously~~ continuity must be held, of the parameters added to the TS packets of video images and thus a value is set at given intervals only in the parameter setting section 44 of the media data coding and multiplexing apparatus 4.

*Please replace the paragraph beginning on page 19, line 12 with the following rewritten paragraph.*

As described above, according to the first embodiment, the parallel processing control circuit and ~~a~~-the plurality of media data coding and multiplexing apparatus are used in combination, whereby multiplex media data coded stream preparation containing high-definition video can be easily accomplished. Further, ~~and further~~-if parameters having continuity are added only in the parameter setting section of the media data coding and multiplexing apparatus at the final stage, parameters which need

to be set continuously can be set in one batch and continuity  
can be ~~held~~ maintained easily.

*Please replace the paragraph beginning on page 19, line 22  
with the following rewritten paragraph.*

In the first embodiment, the video signal dividing circuit  
5 divides the video signal into four pieces and four media data  
coding and multiplexing apparatus are connected, but the number  
of pieces into which the video signal is divided and the number  
of media data coding and multiplexing apparatus may each be any  
such number, as two, three, or eight.

*Please replace the paragraph beginning on page 20, line 3  
with the following rewritten paragraph.*

In the first embodiment, the voice signal and the data  
signal are ~~input~~ provided to only one of the four connected  
media data coding and multiplexing apparatus. However, ~~but~~ all  
of four into which one is divided like the video signal may be  
~~input~~ provided or the voice signal and the data signal may be  
~~input~~ provided to more than one media data coding and  
multiplexing apparatus.



*Please replace the paragraph beginning on page 20, line 9 with the following rewritten paragraph.*

In the description of the first embodiment, the multiplexing section of each media data coding and multiplexing apparatus can ~~input~~ receive one video signal, one audio signal, one data signal, and three external signals, but the number of inputs may be increased or decreased to match ~~any matching~~ the media data to be processed.

*Please replace the paragraph beginning on page 20, line 15 with the following rewritten paragraph.*

Further, if a ~~no~~ no video signal and an ~~no~~ no audio signal are provided ~~not input~~, instead a data signal, etc., may be ~~input~~ provided and be allowed to pass through the video coding section and the audio coding section without coding.

*Please replace the paragraph beginning on page 20, line 19 with the following rewritten paragraph.*

That is, the inputs can also be used for inputting a ~~the~~ the data signal and external signals.

*Please replace the paragraph beginning on page 20, line 21 with the following rewritten paragraph.*

In the first embodiment, audio coding is executed in the media data coding and multiplexing apparatus 4, but it is also possible to stop audio coding, namely, not to operate the audio coding section depending on the processing amount required for video coding and the processing capability of the video coding section of the media data coding and multiplexing apparatus. Thus, it is also ~~made~~ possible to connect a newly added media data coding and multiplexing apparatus for coding video and audio.

*Please replace the paragraph beginning on page 21, line 5 with the following rewritten paragraph.*

In the first embodiment, processing of the media data coding and multiplexing apparatus 1 to 3 is limited only to video coding, but inputs other than the video input may be used for inputting a plurality of multiplex media data outputs to the media data coding and multiplexing apparatus 4, whereby it is ~~made~~ possible to output multiplex media data coded stream containing a plurality of video, audio, and data.

*Please replace the paragraph beginning on page 21, line 17 with the following rewritten paragraph.*

In the first embodiment, the control signals 114, 124, 134, and 144 of quantization control signals, etc., are ~~input~~ provided from the control circuit 6 to the video coding sections 11, 21, 31, and 41, but may be ~~input~~ provided collectively to the video signal dividing circuit 5 so that they are input to the video coding sections 11, 21, 31, and 41 together with the divided video signals 110, 120, 130, and 140. At this time, the same may be used as the control signals 114, 124, 134, and 144.

*Please replace the paragraph beginning on page 21, line 25 with the following rewritten paragraph.*

In the first embodiment, the control circuit 6 for ~~inputting~~ receiving the information pieces 113, 123, 133, and 143 concerning video such as the nature of the video image and outputting the control signals 114, 124, 134, and 144 is placed outside the media data coding and multiplexing apparatus, but may be placed inside each media data coding and multiplexing apparatus.

*Please replace the paragraph beginning on page 22, line 22 with the following rewritten paragraph.*

Further, in this case, ~~only~~ the control circuit 6 ~~of~~ within any one of the media data coding and multiplexing apparatus 1 to 4 may be used for receiving ~~inputting~~ and providing ~~outputting~~ the control signals and the information pieces concerning video such as the nature of video from and to the video coding section in each media data coding and multiplexing apparatus.

*Please replace the paragraph beginning on page 22, line 16 with the following rewritten paragraph.*

In the first embodiment, the media data coding and multiplexing apparatus 1 to 4 differ in parameter addition method of the CC value, etc., according to where the media data coding and multiplexing apparatus 1 to 4 are connected, but the CC value may be added at any connection positions and the media data coding and multiplexing apparatus 4 at the final stage may overwrite the value with the correct value. In this case, however, each parameter setting section 14, 24, 34, 44, references only the PID and adds the CC value to the target TS packet without ~~being conscious of~~ regard to whether the input is

a TS packet prepared in the media data coding and multiplexing apparatus or a TS packet making up a part of a multiplex coded stream input from the outside.

*Please replace the paragraph beginning on page 24, line 1 with the following rewritten paragraph.*

FIG.4 is a general block diagram of the media data coding and multiplexing apparatus 1 according to the second embodiment of the invention.

*Please replace the paragraph beginning on page 24, line 25 with the following rewritten paragraph.*

The multiplexing section 13 packets the coded video signal 111 output from the video coding section 11, the coded audio signal 211 output from the audio coding section 12, the input data signal 310, and the external inputs 115, 116, and 117 and outputs the result as the multiplex coded stream 118. The external inputs 115, 116, and 117 may receive multiplexed streams from other media coding and multiplexing apparatus, but are not limited to those only.

*Please replace the paragraph beginning on page 25, line 16 with the following rewritten paragraph.*

According to the second embodiment, not only the media data coding and multiplexing system made up of a plurality of pieces of media data coding and multiplexing apparatus, but also the media data coding and multiplexing apparatus ~~singly~~ can operate on its own.

*Please replace the paragraph beginning on page 25, line 21 with the following rewritten paragraph.*

In the description of the second embodiment, the control signal 114 is ~~input~~ provided from the external control circuit 6, but the control circuit 6 may be placed in the media data coding and multiplexing apparatus 1.

*Please replace the paragraph beginning on page 30, line 10 with the following rewritten paragraph.*

According to the invention, there is provided, in a multiplexing apparatus for coding various ~~ieces~~ pieces of media data of video, audio, etc., packeting the media data, and multiplexing the packet string, a media data coding and multiplexing method comprising the steps of coding and

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outputting the media data, packeting the output media data and multiplexing the packet string, and selectively adding a parameter to the packet string and outputting the result, so that the necessary parameters can be easily set in a batch.